



University of HUDDERSFIELD

University of Huddersfield Repository

Warnock-Smith, David

A review of commercial air policies: Identifying the gaps

Original Citation

Warnock-Smith, David (2016) A review of commercial air policies: Identifying the gaps. In: 20th Air Transport Research Society Conference, 23rd - 26th June 2016, Rhodes, Greece.

This version is available at <http://eprints.hud.ac.uk/id/eprint/28866/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

2016 ATRS World Conference, Rhodes, Greece

A review of commercial air policies: Identifying the gaps

Warnock-Smith, D^{a*}

^aDivision of Logistics, Transport and Tourism
Business School
University of Huddersfield
Queensgate
Huddersfield
HD1 3DH

*Corresponding author: d.warnock-smith@hud.ac.uk

Abstract

Commercial Air Service Agreements remain the overwhelming focus when it comes to assessing the degree of liberalisation and deregulation in air transport markets. If individual countries are assessed for levels of traffic growth, competition and overall competitiveness, it becomes clear that there is a wide range of policy levers that can restrict markets but go way beyond the realms of official Air Service Agreements. This study provides a fresh holistic view of policy barriers restricting growth in world air transport markets by assessing non-ASA policies affecting the airline sector directly as well as levels of (de)regulation in the related airport sector. A selection of case countries provides evidence that if traffic growth, competition and resultant consumer welfare as a result of overall competitiveness are the objective functions of policy-makers, it is advisable for states to create much more comprehensive commercial air policy frameworks and more holistic measures/indices by which to benchmark levels of policy 'liberalness'.

Key words: Air Policy, Air Service Agreements, Commercial policies, Air Liberalization Index (ALI), air transport markets

1. Introduction

By 2016, the number of official Air Service Agreements (ASAs) between World Trade Organisation (WTO) members, guiding the provision of commercial air transport services worldwide had reached over 1,830 between 160 signatory states (ASAP, 2016). Using a WTO Secretariat devised measure of air liberalisation (the Weighted Air Liberalisation Index or WALI), the average degree of freedom within these ASAs was only 15.5 out of a maximum scope of 50 or to put it another way many additional steps towards liberalisation could still be taken between the WTOs many member states despite concerted efforts at national and international level to allow the world's airlines to operate free of market distorting policy restrictions. Aside from this seemingly lacklustre global effort towards full liberalisation between WTO member states, this study aims to highlight a set of

additional gaps both in the way commercial air transport liberalisation is assessed and in the uncertainty surrounding the true level of freedom that the world's commercial air carriers are subject to on an on-going basis.

Historically ASAs have covered important policy levers such as the granting of traffic rights, statements on capacity and tariff restrictions, carrier designation rules and in a lower number of cases, guidelines in relation to the ability for carriers to enter into cooperative arrangements and cross-border ownership, the last one being particularly relevant in today's global drive towards various forms of airline consolidation. Less common still within ASAs are statements specifically aimed at cargo only operators. The *status quo* regulatory framework relevant to cargo only operators as well as other major aviation supply chain players such as airports, ground handlers, manufacturers and Air Navigation Service Providers (ANSPs) is much less clear with the level of underlying restrictions on such sub-sectors and the resulting competition effects currently very fragmented at best and at worst foggy and ambiguous, which can be unhelpful in a what is an intrinsically global industry with extremely high levels of cross-border activity. Even in the case of ASAs there is still a degree of uncertainty around the number of "unused" traffic rights and the prevalence of "orphan" services; i.e. services that are permitted to operate without an overriding ASA (extra-bilateral negotiations and MoUs) (OECD, 2010). Data quality on official ASAs between non-member states of WTO as well as on members of ICAO that have not properly updated the body's World Air Service Agreement Database also add to the lack of clarity on the true level of openness guidelines the worlds air transport industry.

Last but not least there is the issue of non-ASA related regulations and policies that may or may not hinder the pursuit of purely commercial air transport operations or at the very least provide an additional cost or time/knowledge barrier to free market entry and exit. Such regulations could be unilateral (i.e. pertinent to one jurisdiction only) as is the case with an individual country's provision of subsidy to individual carriers, for instance or multilateral as illustrated by the well-known European Union rules around the allocation of airport slots or passenger rights, for example. It must be noted that the level of harmonisation and standardisation in relation to safety and technical policies worldwide, though not perfect, is at a much more advanced stage than commercial air policy harmonisation/standardisation, largely due to the ease with which the world's jurisdictions have been able to come to consensus arrangements on air safety issues together with the supra-national efforts of ICAO and to a lesser degree IATA over many decades.

The paper continues with an in-depth overview of commercial air policy literature to date (section 2), the selection of case countries for policy analysis in section 3, the results in terms of policy gaps and unknowns as highlighted in the case country examples (section 4) before section 5 concludes.

2. Review of literature on commercial air policy to date

There is already a plethora of literature on air transport liberalisation and deregulation from a wide range of academic and non-academic sources (namely Oum, Button, Gillen, ICAO, IATA, EC, Booz Allen, Intervistas etc.). The remaining gaps are largely centred on scoping and geographical omissions. The scoping gaps revolve around the non-inclusion of artificial or non-Air Service

Agreement barriers to trade in air services in liberalisation and deregulation assessments that are designed to give an overall measure of the degree of liberalness or deregulation. This can be troublesome when such assessments are then used to measure the impact of policy on air traffic, costs, revenues, customer service and efficiency *inter alia*. Arguably some of the biggest barriers to effective market freedom come from the aviation supply chain. Examples include airlines gaining access to competitive airport and ground handling services. Both of these sub-sectors are not covered by official Air Service Agreements and are instead treated unilaterally (or in the case of the European Union multilaterally) in terms of the degree of permitted competition and entry barriers in these supplier markets. Equally Airport and handlers among other suppliers play no official part in ASA negotiations even though they are materially affected by them and also create effective barriers to entry if moves towards liberalisation are not coordinated between them (ICAO, 2003).

The second continued area of omission relates to geographical regions with fewer studies completed to date on parts of Africa, the Middle-East, the Caribbean and Latin America, emerging economies and Oceania, though there have been some studies of late dealing with a narrow ASA centred definition of commercial air policy (Njoya, 2016, United Nations ECLAC, 2015, Warnock-Smith and Morrell, 2008 and Sihna, 2001). In such geographical regions it is also difficult to examine the long-term impact of moves towards deregulation and liberalisation due to the narrower time frame available and smaller number of observable markets in which truly 'liberal' air policies have existed.

One of the recent criticisms of liberalisation and deregulation assessments has been rather static, one-dimensional way in which policy itself has been treated with simple before and after dichotomous measures deemed to be the most appropriate way to measure the impact of moving to more 'open' air transport markets. This weakness led to a spate of recent studies including Gillen et al. (1999), Warnock-Smith and Morrell (2008), WTO (2008), Surovitskikh (2015) and others that adopted an ordinal level ranking of air service agreements and policy lever weighting which developed into a WTO housed Air Liberalisation Index (ALI).

Another continued grey area relates to the relationship between domestic and international liberalisation and deregulation of air transport markets. Studies often focus on one or the other rather than both at the same time, leading to missed opportunities to analyse how domestic and international air policies interact (e.g. domestic liberalisation as an important precursor to international liberalisation as in the case of the United States). Domestic protectionism can often lead to international and intercontinental market distortions, for example, if carriers are not permitted to fly customers on to their final destination or from the true origin point due to domestic barriers to entry. This is very much the case today in countries such as India, the United States, and Russia where at times even national but privately owned carriers face entry barriers never mind the provision of traffic rights to foreign based carriers. In India, for instance, there has

been a long standing 5/20 rule preventing nationally registered carriers from operating international flights until they are at least five year old and have 20 aircraft (Matthews, 2016).

Use of the term deregulation in the same breath as liberalisation is also problematic. Liberalisation of air transport markets can occur, for instance, with the effective broad removal of barriers (e.g. additional traffic rights negotiation with bilateral ASAs) but a myriad of soft and sometimes hard regulatory barriers remain (IATA, 2007), which creep in from the safety/technical side (e.g. EU airline blacklist) or the competition regulations side (e.g. antitrust regulations or similar). The distinction of these two terms is important to ensure assessments do not fall into the same one-dimensional trap.

The way the Air Cargo industry is affected by moves towards liberalisation and deregulation is also given quite short shrift in the literature. It is often unclear in official air service agreements, for instance, if cargo only carriers from designating states have access to the same traffic rights that are made available to passenger only or combination carriers. In a 2002 paper, Zhang and Zhang stated that all-cargo carriers tend to push separate traffic rights given that the existing traffic rights embedded into bilateral Air Service Agreements are based on passenger focussed principles of traffic carriage reciprocity, which is difficult to achieve in freight markets. To date no separate package of traffic rights have ever been put forward by IATA.

3. Selection of case countries

Due to the continued fragmentation of commercial air policy worldwide, selection of illustrative examples is important as any combination of examples can lead researchers to derive different results. The purpose of case selection in this study, however, is merely to highlight the complexities and practical difficulties that can arise as a result of disjointed policy-making as a way of highlighting the need for researchers, policy-makers and industry to work together to fill the remaining gaps and omissions as soon as possible in order to create a clearer more workable framework for air carriers worldwide. Selection was therefore based on having access to published ASA and non-ASA commercial policy data as well as data pertaining to the ASA and non-ASA barriers that airlines operating in such case countries face on an on-going basis. In an effort to help plug the continued geographical gap in air transport liberalisation research, one understudied case country was selected along with one well-studied country. The following two countries were therefore selected:

1. United Kingdom
2. Tanzania

The United Kingdom is a good case country to select as it is a mature market, not as disjointed in terms of air policy as some states but nevertheless subject to ambiguities and discrepancies in market access that carriers serving the UK have to deal with. It is also possible to take a longer term view of the impact fragmented commercial air policy can have on the development of air traffic which may well have taken a different pathway with full market openness over the observable period. Tanzania was selected as the under-studied case country. Unlike the United

Kingdom, Tanzania is in a growth/infancy stage of air traffic development and also at an earlier stage of commercial air policy development, though in effect carriers are still subject to a large number of policy discrepancies and ambiguities as in the UK case.

4. Results

4.1 United Kingdom

The UK has officially taken a liberal approach towards commercial air services and has played its full part in the creation of a Single Aviation Market in Europe. It has also taken a liberal stance towards negotiating with non-EU countries. According to the ASAP database the UK is party to 96 separate bilateral agreements in addition to its multilateral participation in the European Single Aviation Market (a further 28 countries). Aside from the liberal approach to traffic rights within Europe the overall Air Liberalisation Index is relatively low for the UK coming out at 14.3 out of a possible 50. Individual agreements range from 'truly liberal' as is the case with the UK-Singapore ASA signed in 2007 (ALI = 50) to 'restrictive' as is the case with the UK-Barbados bilateral ASA (ALI = 8).

4.1.1. Inconsistency examples

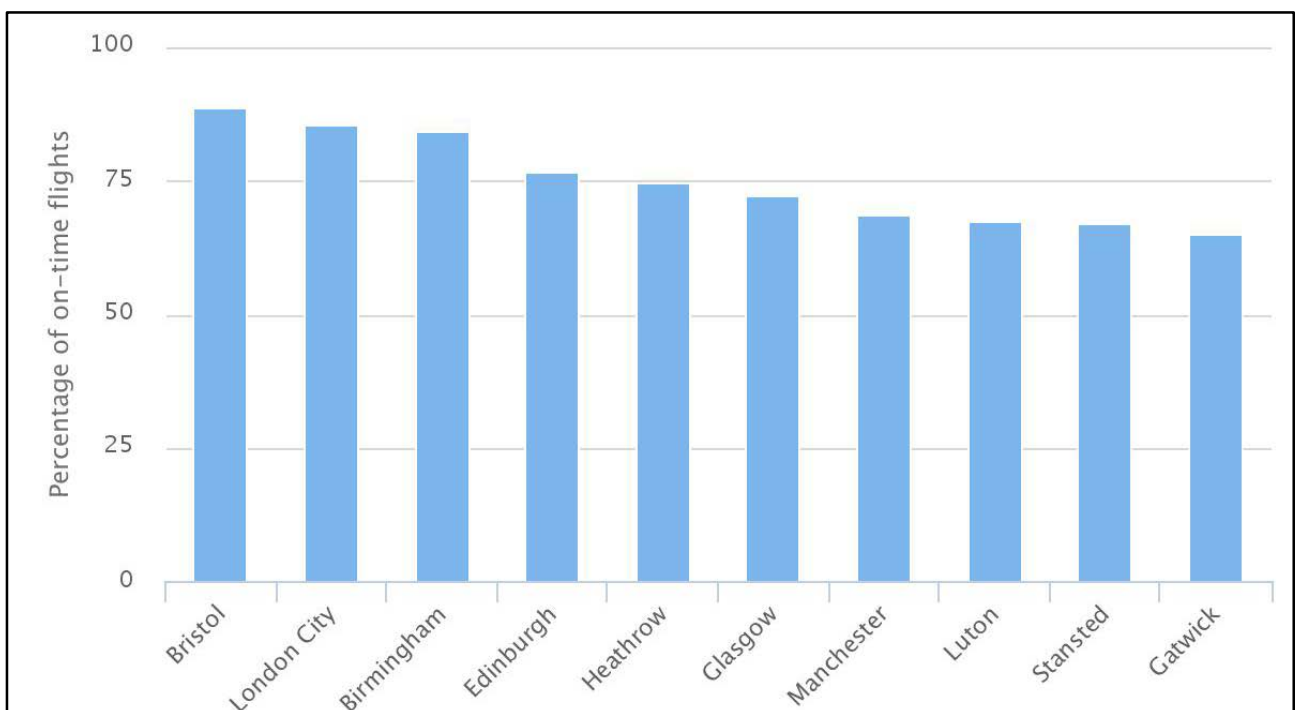
Perhaps the most well publicised contradiction in UK aviation policy over the last 40 years has been successive governments' approaches towards the provision of airport capacity. Despite embarking on an unprecedented airport privatisation process starting in the 1980's, airport capacity expansion has remained restricted and subject to government approval. Airports located in the South-East of England have been particularly restricted in this regard despite all commercial airports in the South-East being in private hands. Various justifications can be put forward as to why seemingly necessary airport expansion has been blocked, but the implications for airlines and users nevertheless remain significant (see below section 4.1.2). As noted in the current UK Aviation Policy Framework (2013), the Civil Aviation Authority has powers to influence and control the commercial behaviour of the air transport sector. In practice they have particularly focussed on airports which have had a powerful indirect effect on airline operations. Current airport charging regulations at London Heathrow and Gatwick, though sincere in trying to prevent any anti-competitive airport behaviour, have in themselves risked distorting natural market entry and exit by airlines wishing to serve these airports at a higher price point and by implication higher service level. A third area of possible contradiction is that of Airport Performance Charters. With its vested powers, the CAA directed airports, particularly in the South-East of England, to assess the feasibility of developing guidelines that might optimise utilisation of runway resources at airports. The example given in the UK's Aviation Policy Framework (2013) is that of the Heathrow airport community, who in 2012 agreed a winter schedule with a lower hourly capacity limit to improve reliability. Again, though the intention of such policies and directives might be genuine, such measures still constitute market interference, creating barriers to entry for carriers who may otherwise have been able to provide a desirable service to and from Heathrow.

4.1.2. Implications for air carriers and examples

In the case of UK airport capacity, there have been two major impact areas for airlines; the first has been the stifling knock-on effect in obtaining convenient and costless slots. At the end of a long line of extortionate, Oman Air recently agreed to pay a record US\$75mn for a pair of take-off and landing slots at London Heathrow (Sunday Times, 2016). The proceeds of the sale went straight to incumbent carrier Air France-KLM, with Oman Air still subject to the regular aeronautical fees charged by Heathrow airport. It is important to note that even if Oman Air or carriers from other states have the traffic rights to serve points in the United Kingdom, the expense of serving the lucrative London market effectively acts as a barrier to entry for many carriers, especially smaller airlines that may offer good niche products but are unable to make such high one-off payments for grey market slots.

The second major implication has been for airline operating performance at capacity congested airports. Figure 1 shows there has been a clear impact from continued government capacity restrictions on airline operating performance at South-East airport, though for the Year 2015 London Heathrow airlines performed better than Manchester and Glasgow. The bottom three airports are all located in the restricted South-East, however. International gateways such as Tokyo Haneda and Atlanta, not subject to such prolonged capacity restrictions achieved 91% and 84% on-time performance respectively in 2015.

Figure 1: On-time performance at a selection of UK airport in 2015



Source: The Telegraph (2016) OAG 2015 data

While an airline like British Airways operates in many unrestricted or partially unrestricted markets officially, in reality its freedom to operate unrestricted and at the scheduled times it says it wants

to operate is still quite restrictive. In 2015 BA achieved a modest 76% on-time rating with its main base in London Heathrow, down from 77% in 2014.

Airlines based in the UK have frequently lobbied the UK government for more, not less regulation on airports charges to ensure they are lower and reflective of airport costs (Regulated Asset Base - RAB). EasyJet, for instance, recently lobbied for a RPI-8.5% reduction in charges in June 2013 contrary to the proposed increase by the airport of RPI+1% (easyJet, 2013). This difference was driven by analysis of LGWs RAB and investment plans completed by the Gatwick Airport Consultative Committee, which suggested that charges were too high at the time. On the other hand, easyJet as the largest operator at Gatwick (40%+ of all flights) combined with the stakeholder relationships built up over time between easyJet, the Gatwick ACC and the airport operator itself can create artificial barriers for other airlines that perhaps would want to push for a more differentiated airport product and would have been willing to pay additional airport charges for it. While a carrier such as easyJet seemingly operates in a very liberal Single Aviation Market in Europe, it is evident that they still have to fight hard to ensure that they do not face other non-ASA barriers to natural expansion and growth, whether it be through the actions of their privately owned airport partners or the regulatory action of the UK government (and CAA).

Airport Performance Charters also act as a non-ASA barrier to entry for some carriers. In response to a South East Airport Task Force report draft, two CAA airline members expressed concerns that it would be disproportionate for a charter to include services supplied by airlines in the absence of a market failure; that a charter could itself actually distort the market by preventing service differentiation; and that airlines were also subject to direct consumer regulation such as EU261 (Passenger Right Legislation), which can be enforced in the event of failure. Perhaps most concerning of all, the charter concept was deemed to be straying from the original intention of protocols during periods of temporary capacity reduction into subjective micro-management, and the airport potentially interfering with airline/customer relations or imposing requirements unilaterally on airlines through the airport 'Conditions of Use' (CAA, 2012). Such issues raised by airline partners have led to a mixed response by airports in the South-East in terms of rolling out Airport Passenger Charters fully and serve to highlight the delicate balancing act the CAA has to perform in the carrying out of its Civil Aviation Act derived regulatory powers. It is clear that the UK CAA is reluctant to do anything that infringes on its stated objective of promoting market driven competition between airlines and between airports.

4.2 Tanzania

According to the ASAP database Tanzania is party to only 23 separate bilateral agreements with an overall Air Liberalisation Index of 11.4 out of a possible 50. Interestingly one of their most liberal agreements is with the UK (ALI = 26), first signed in 1980 and updated on a number of occasions with the most recent version being signed in 2004. It is also the busiest country-pair market to from Tanzania with annual traffic in the 100,000-500,000 range (ASAP, 2016). No agreements with regional partners are covered by the ASAP database, however, which indicates that they have been treated separately as extra-bilateral agreements or have simply not been properly registered

with the ICAO World Air Service Agreements database from which the WTO ASAP database is extracted. This in itself can lead to some ambiguity in the de facto policy level between bilateral or multilateral partners.

4.2.1. Inconsistency examples and implications for air carriers

As far back as 2006, it was agreed as part of the East African Community (EAC) trading bloc work into the liberalisation of air services, that Tanzania, Kenya and Uganda would have harmonised and full liberal traffic rights for carriers operating between the three countries in line with the Yamoussoukro Decision (YD) (EAC, 2013). The reality experienced by individual air carriers has been markedly different, however, with specific ASA related barriers continuing to remain in effect. As recently as 2015, air carriers appear to have become the victims of tit-for-tat policy moves with Kenya Airways being the victim of a 2015 decision by the Tanzania Civil Aviation Authority to restrict access to all but three gateways in Tanzania (Dar es Salaam, Zanzibar and Kilimanjaro) in addition to the imposition of 60% frequency cuts and a clear specification of aircraft gauges permitted for Kenya Airways (Embraer 190 or Boeing 737-800). This move was evidently in response to a spate of restrictive moves by the Kenya Civil Authority to include the restriction of Tanzanian Tour Van to pick up passengers from Jomo Kenyatta International Airport in Nairobi (The Citizen, 2015). This is a classic example of inconsistency within ASAs and beyond ASAs, which when mixed together translate into significant barriers to entry for air carriers, regardless of official statements of progress made by respective Ministries of Transport and regional trading bloc officials. In fact for Kenya Airways, this policy shift represented a forced 67% capacity cut on all routes to Tanzania, irrespective of passenger/cargo demand or possible effects on efficiencies, fares and overall service levels. Kenya Airways had to find a short terms solution to redeploy capacity on to other routes (The Citizen, 2015).

The second case that illustrates policy inconsistencies relates to Low-Cost Carrier FastJet. It has been widely reported that efforts to obtain Aircraft Operating Certificates both in its base country Tanzania and in neighbouring countries have been needlessly long and drawn out. This is then followed by a similar unexplained delay in the processing of traffic rights (CAPA, 2014). Protectionism of national carriers appears to be the driver of such moves in Tanzania, Zambia, South Africa among others, where job security of national airlines take precedence over consumer demand for low-cost, low-fare travel and some level of competition. FastJet Tanzania was repeatedly blocked by the Kenyan Civil Aviation Authority from operating a dual designation on routes such as Dar es Salam-Nairobi, - Mombasa, Kilimanjaro-Nairobi and Zanzibar-Nairobi. This was primarily due to the fact that incumbent carrier Kenya Airways would have to face some low-cost competition on the previously monopolistic routes. If linked with the previous example, it becomes clear that the tit-for-tat policy shifts between Tanzania and Kenya have had a long history (CAPA, 2014). The practise of employing delay tactics or adding additional layers of bueracracy are tried and tested non-ASA barriers to entry, which have clearly been exercised in relation to ambitious LCCs such as FastJet. Tanzania, one of the first countries to take a liberal approach towards the setting up of new LCCs have not backed this up with their approach towards liberal ASA negotiations with neighbouring countries, which inadvertently come back to bite home

based carriers such as FastJet when neighbouring countries also tighten their ASA and non-ASA restrictions.

Other non-ASA barriers that have been widely reported in Tanzania include delays and refusals to grant self-handling status and the use of Airports Authorities (the TAA in this case) to create barriers to entry by, for instance, delaying the building of taxiways to new air carrier facilities in an effort to disrupt progress towards the commencement of new competitive or non-competitive routes. The latter can be especially prevalent if the airport operator is owned and/or controlled by a protectionist government or in some way has an incentive economic or otherwise to offer preferential treatment to incumbent carriers. All of the above non-ASA barriers were deployed in 2011 in the case of newly privatised carrier Precision Air, which had a minority Kenyan shareholding (Thome, 2001). While on the face of it the states Tanzanian policy has been seemingly liberal towards air carrier privatisation and liberalisation, it is evident that the reality faced by new entrant or even incumbent carriers can be quite different due to the imposition of non-ASA barriers or due to a departure from officially stated ASA terms based primarily on protectionist motivations.

5. Conclusions and suggested next steps

This study sought to highlight some continuing gaps in the assessment of commercial air policies. The UK and Tanzania cases, though not comprehensive, have served to illustrate the continued paradoxes and ambiguities that exist in the formulation and implementation of commercial air policies and the difficulties such inconsistencies can present for new entrant and incumbent air carriers.

Moves towards creating a quantifiable index in relation to ASAs has certainly been a step forward in assessing the impact of liberalisation and it was positive to see the work of researchers and theorists work their way into ICAO and the World Trade Organisations with official Air Service Indices being created to be used by policy makers, practitioners and researchers alike.

This research highlights, however, the sheer quantity of work that is still left to be completed in this area and, though additional anecdotal and quantitative evidence is required, the findings shown in this study already point towards the need to create a more holistic, all-encompassing index that would take account of official ASA versus de facto ASA policy differences, an exhaustive list of non-ASA barriers and a fuller scope to take in all world regions, aviation supply chain distortions (airports and other suppliers), and a complete range of air services (passenger, cargo only, charter etc.).

The selection of case countries in this study also allow for a comparison of how policy inconsistencies play out in each country. In the case of the UK, many of the continued barriers appear to centre of airports and airport capacity and how that is managed and translated into regulations that may or may not represent barriers to entry. This type of situation could be more representative of developed, mature air transport markets, though the planning situation and chronic lack of land space for expansion would be more unique to the UK and west European cases

than for advanced air transport markets elsewhere. In the case of Tanzania it was found that departures from stated policies (e.g. liberalisation and privatisation) can often fly in the face of protectionist sentiments. This type of situation can be more reflective of growing, infant markets where policy makers face the uncertainty of growth forecasts materialising or not and whether national interests (e.g. national airlines), should benefit most from additional demand even if measures taken to protect such infancy industries might stifle off this demand in the first place.

List of references

- ASAP (2016) WTO Air Services Agreements Projector: Accessed on line at:
<https://www.wto.org/asap/index.html>
- Aviation Policy Framework (2013), Presented to parliament by the Secretary of State for Transport, March, Cm8584, The Stationary Office Ltd.
- CAA (2012), Civil Aviation Authority Airport Performance Facilitation Group Progress Report for the Minister of State, 21 November, Accessed on-line at:
<https://www.whatdotheyknow.com/cy/request/164349/response/407288/attach/html/5/CAPA>
- CAPA (2014) fastjet 2015 outlook: fleet expands and new affiliates launch but profitability remains challenging, 30th December, Accessed online at: <http://centreforaviation.com/analysis/fastjet-2015-outlook-fleet-expands-and-new-affiliates-launch-but-profitability-remains-challenging-203064>
- EAC (2013) Liberalisation of air transport market in EAC on Course, 24th January EAC Secretariat, Arusha, Accessed on-line at:
http://www.eac.int/infrastructure/index.php?option=com_content&view=article&id=153:liberalization-of-air-transport-market
- easyJet (2013) easyJet response to CAA's Q6 proposals, Accessed on-line at: easyJet response to CAA's Q6 proposals
- Gillen, D, Harris, R and Oum, T.H (1999), "Evaluating air liberalization agreements: An integration of demand analysis and trade theory", In Gaudry, M. and Mayes, R.R, Editors of, "Taking Stock of Air Liberalization", Kluwer Academic, Publishers, Amsterdam
- IATA (2007), Airline liberalisation, IATA Economics Breifing No 7, Mark Smyth and Brian Pearce, April, Accessed online at:
https://www.iata.org/whatwedo/Documents/economics/IATA_AirlineLiberalisation.pdf.
- ICAO (2003) What Liberalization Means for Airports, Aviation in Transition: Challenges & Opportunities of Liberalization, Presentation by Robert Aaronson, ACI Director General, 22-23rd March.
- Matthews (2016) India To Get New Aviation Policy After 20 Years of Talks, AIN Online, Accessed online at: <http://www.ainonline.com/aviation-news/air-transport/2016-02-08/india-get-new-aviation-policy-after-20-years-talks>.
- Njoya, E. T. (2016) Africa's single aviation market: The progress so far. *Journal of Transport Geography*, 50, 4-11.
- OECD (2010) Fog in the Skies: Assessing the openness of aviation policies, 15-16th November, Antonia Carzaniga and Pierre Latrille, WTO Secretariat (Powerpoint Presentation).
- Sihna, D (2001) Deregulation and liberalisation of the airline industry in Asia, Europe, North America and Oceania, Ashgate Publishing Ltd, Surrey, UK.
- Sunday Times, (2015) Oman breaks Heathrow record with deal for slots, 14th February, Accessed on-line at: <http://www.thesundaytimes.co.uk/sto/business/Industry/article1668028.ece>
- Surovitskikh, S., Lubbe, B (2015) The Air Liberalisation Index as a tool in measuring the impact of South Africa's aviation policy in Africa on air passenger traffic flows, *Journal of Air Transport Management*, Volume 42, January 2015, Pages 159-166
- The Citizen (2015) Tanzania hits Kenya where it hurts, March 19, Accessed online at:
<http://www.thecitizen.co.tz/News/national/-/1840392/2658470/-/I4k8awz/-/index.html>
- Warnock-Smith, D and Morrell, P (2008) Air transport liberalisation and traffic growth in tourism-dependent economies: a case-history of some US-Caribbean markets, *Journal of Air Transport Management*, 14, pp. 82–91.

- WTO (2008) Liberalization of Air Transport Services and Passenger Traffic, Economic Research and Statistics Division, Piermartini, R and Rousova, L, Staff Working Paper ERSD-2008-06, December
- The Telegraph (2016) Capacity crisis at UK airports revealed by delays league, Tovey, A, 06th January, Accessed online at:
<http://www.telegraph.co.uk/finance/newsbysector/industry/12085660/>
- Thome, W.H (2011) Tanzania aviation news: One last stumbling stone for Precision Air IPO, October 8th, Accessed online at:
<https://wolfgangthome.wordpress.com/2011/10/08/tanzania-aviation-news-one-last-stumbling-stone-for-precision-air-ipo/>
- United Nations ECLAC (2015) Transport and aviation policy in Latin America and the Caribbean in the context of sustainable development, FAL Belletin, 341(5), pp1-7.
- Zhang, A and Zhang, Y (2002) Issues on liberalization of air cargo services in international aviation, Journal of Air Transport Management, 8, pp275-287.